

Georgia-Pacific LLC

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June 10, 2011

Kay Edly
Water Resources Division
Michigan Department of Environmental Quality
P.O. Box 30273
Lansing, MI 48909

Subject:

Willow Boulevard/A-Site Landfill Operable Unit Kalamazoo Township, Michigan Request to discharge water treatment additive

Dear Ms. Edly,

Georgia-Pacific recently submitted an application for a Substantive Requirements Document (SRD) covering wastewater discharges from the Willow Boulevard/A-Site Landfill Operable Unit in Kalamazoo Township, MI. An approved SRD was issued by the State on May 19, 2011 (SRD No. MIU990030). The wastewater discharges include treated drainage water, wash water, and stormwater resulting from the staging and drainage of excavated soils. As described in the SRD application, the treatment processes will include sedimentation followed by multimedia filtration and two-stage activated carbon adsorption.

Based on previous experience with work in the former Plainwell Impoundment and the Plainwell No. 2 Dam Area between 2007 and 2010, we occasionally encountered difficulty in treating turbid drainage waters during periods of heavy rainfall. The water treatment operations would benefit from the ability to add a coagulant or flocculent to the sedimentation process and/or additional filtration operations during periods of high water turbidity. We therefore request approval to use one or both of the following additives, in accordance with MDEQ requirements for discharge of water treatment additives as posted at the following web site: <a href="http://www.michigan.gov/deq/0,1607,7-135-3313">http://www.michigan.gov/deq/0,1607,7-135-3313</a> 3686 3728-11385--,00.html

We propose to use products which are already included on the state's Water Treatment Additive List. Therefore, the toxicity test information from Items g and h has already been submitted. The remaining information required is:

- a. The water treatment additive Material Safety Data Sheets (MSDS) are included for the coagulant, AQ-100, and the flocculent, AQ-109, sold by AquaMark, Inc.
- b. The proposed water treatment additive would be applied at a dosage of approximately 50 parts per million (ppm) for the coagulant or 10 ppm for the flocculent. The coagulant/flocculent

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remains attached to solids and will be removed during the sedimentation and filtration operations. If any residual coagulant/flocculent remained, it would be captured on the two-stage activated carbon adsorption units. Therefore, the discharge concentration of the additive is expected to be negligible.

- c. The discharge frequency will vary dependent on construction operations and at a maximum will continue throughout the construction period up to 24 hr/day.
- d. The outfall where the water treatment additive is to be discharged depends on where sediment is being excavated; the discharge would be from either Outfall 001 or Outfall 002. Discharge would be from only one of the two outfalls at any time.
- e. The type of removal treatment which the water treatment additive receives prior to discharge will be sedimentation and filtration. The water treatment additive will adsorb to the solids which will be removed by sedimentation and multimedia filtration. Any water treatment additive not adsorbed to solids and settled or filtered will be removed by two-stage activated carbon.
- f. The water treatment additive function is either a coagulant or flocculent for suspended solids removal.

Should you have any questions or comments, please do not hesitate to contact me at (734) 439-1205.

Sincerely,

**Garry Griffith** 

Director - Environmental Field Services

DMSpi for Gary Griffith

cc: Alvin Lam, MDEQ Michael Bray, MDEQ Kristi Zakrzewski, P.E., MDEQ Michael Berkoff, USEPA Pat McGuire, ARCADIS Bill Rankin, P.E., ARCADIS